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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/548,910	04/13/2000	Brian M. Bass	RAL9-00-0014	7797

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IBM CORPORATION
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EXAMINER

PHUNKULH, BOB A

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 07/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/548,910

Applicant(s)

BASS ET AL.

Examiner

Bob A. Phunkulh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4, 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Specification

2. The disclosure is objected to because of the following informalities: please provides the remaining application numbers cited in pages 2-3.

Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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3. Claim 2 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of copending Application No. 09/548,912. Although the conflicting claims are not identical, they are not patentably distinct from each other because elimination of an element and its function provides no patentable difference. It is well settled that elimination of elements and their function is considered to be obvious to one of ordinary skill in the art at. In re Karlson, 453 USPQ 184 (CCPA 1963).

The scope of the claim is broader than the scope of the claim in copending application where the limitation "said selection from a weighted fair queue including calculating a new position in the weighted fair queue based on the size of the packet and the weighting factor for the information unit selected" is omitted in the instant claim.

4. Claim 2 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of copending Application No. 09/548,907. Although the conflicting claims are not identical, they are not patentably distinct from each other because elimination of an element and its function provides no patentable difference. It is well settled that elimination of elements and their function is considered to be obvious to one of ordinary skill in the art at. In re Karlson, 453 USPQ 184 (CCPA 1963).

The scope of the claim is broader than the scope of the claim in copending application where the limitation sending from "one processor" to the network is omitted in the instant claim.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Objections

5. Claim 2 is objected to because of the following informalities: please correct the subject matter "from" in line 14, to --to--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claim 2 is rejected under 35 U.S.C. 102(e) as being anticipated by Ohba (US 6,101,193).
8. **Regarding claim 2**, Ohba discloses a method of selecting during any processing cycle one processed information unit (*frames or packets or ATM cells*) from in a plurality of information units ready at that time for transmission from a network processor toward a data transmission network, the method comprising the steps of.

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-receiving priority information about each of the information units ready for processing (**see col. 5 lines 27-35**);

-placing each information unit ready for transmission into one of several prioritized queues based on the priority information associated with each processing unit, one of the queues being time-based and an other one of the queues being time independent (*one of the active queue 44 acts as time-based queue and the other as time-independent queue, see col. 5 lines 37-45 and col. 5 lines 54 to col. 6 line 8*);

-selecting one of the queues to service at each time cycle based on a stored set of rules and selecting one of the information units from the selected queue according to an algorithm (*the scheduling unit has first and second scheduling queues for holding the scheduling information corresponding to top packets of non-empty packet queues; the first scheduling queue holds the scheduling information of those packet queues for which a value obtained by subtracting a packet length of a top packet from a corresponding counter value is greater than or equal to 0, while the second scheduling queue holds the scheduling information of those packet queues for which a value obtained by subtracting a packet length of a top packet from a corresponding counter value is less than 0; the scheduling unit takes out one scheduling information from the first scheduling queue, at a time of packet output, see col. 3 line 30 to col. 4 line 7*);

and

-sending the selected information unit to the network.

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9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pillar et al. (US 6,438,106), hereinafter Pillar, in view of Sterne et al. (US 5,818,839), hereinafter Sterne.

Regarding claim 1, Pillar discloses an apparatus for periodically moving information units from a plurality of sources to an output destination based on information stored about each of the plurality of sources, the apparatus comprising:

-a first time-based calendar which handles some of the information units based on the information stored about the plurality of sources (*CS0 connection schedulers servers real-time ATM class or time-based, see figures 1 and 5 and col. 5 lines 33-35*);

-a second time-based calendar which handles other of the information units based on the information stored about the plurality of sources (*CS1 connection schedulers servers real-time ATM class or time-based, see figures 1 and 5 and col. 5 lines 33-35*);

-a third calendar which is time-independent which handles other of the

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information units based on information stored about the plurality of sources (CS3 *connection schedulers servers non- real-time ATM class or time-independent*, **see figures 1 and 5 and col. 5 lines 33-35**); and

-a fourth calendar which handles information units based on limiting peak burst rate, providing a scheduling delay when the peak burst rate exceeds a calculated value (*the GCRA-PGQ scheduler monitors outgoing traffic (cells being transmitted to the link) for each of a plurality of classes. If the scheduler detects that traffic for a given class exceeds predetermined GCRA-measured limits (such as, for example, excessively "bursty" traffic that exceeds the peak rate and/or burst tolerance of the GCRA), the scheduler reduces the priority accorded to that class, until the traffic for that class returns to a value within the GCRA-measured limits*, **see col. 6 lines 59-67**).

Pillar is silent on the apparatus further comprises of a timer which periodically generates a signal which moves a single information unit to the output destination, with the single information unit chosen based on stored rules. It should be noted that it is well known in the art to provide a timing reference or cycle in a scheduling device for determining timing reference.

Sterne, on the other hand, teaches a scheduling apparatus comprises of a timer (clock selection device 20 in figure 2 and master clock 42 in figure 3) which periodically generates a signal which moves a single information unit to the output destination, with the single information unit chosen based on stored rules (see figures 1-3 and col. 1 line 50-67; and col. 2 lines 12-30).

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Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to provides the timer, for generating a timing signal, of Sterne in the scheduling apparatus taught by Pillar for providing the apparatus with a reference signal for traffic shaping or scheduling ATM cells from various schedulers or calendars to a single output –thus the scheduling apparatus ensures that the traffic conforms to the specified parameters for each flow.

Conclusion

11. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications intended for entry)

Or:

Hand-delivered responses should be brought to Crystal Park II, 2021

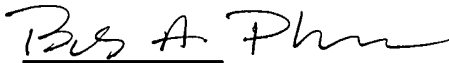
Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bob A. Phunkulh** whose telephone number is **(703) 308-8251**. The examiner can normally be reached on Monday-Friday from 8:00 A.M. to 4:00 P.M.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor **Douglas W. Olms**, can be reach on **(703) 305-4703**. The fax phone number for this group is **(703) 872-9314**.

Bob A. Phunkulh

A handwritten signature in cursive script, appearing to read "Bob A. Phunkulh", written over a horizontal line.

TC 2600

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July 14, 2003